

Title (en)  
CUTTING BLADE AND ROTARY CUTTING TOOL

Title (de)  
SCHNEIDEEINSATZ UND ROTIERENDES SCHNEIDWERKZEUG

Title (fr)  
LAME DE COUPE ET OUTIL DE RASAGE ROTATIF

Publication  
**EP 2703138 A1 20140305 (EN)**

Application  
**EP 12776292 A 20120404**

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• JP 2012002357 W 20120404

Abstract (en)  
The invention provides a cutting blade reduced in thickness and accordingly produced with less blade materials wherein the flexural rigidity of the whole blade is improved. A base material used in the blade is a steel material, a cemented carbide, or a steel material with a cemented carbide used in an edge part of the blade alone. The blade is a long and thin plate having a nearly rectangular shape and elastically deformable. The blade is approximately 0.5 mm in thickness. In the blade, the use of any costly blade materials is minimized. As a result, the blade is made available at low prices. A flank face of the blade has a clearance angle that equals 0°. In the blade, a predefined area of a rake face including a cutting edge is coated with a chromium nitride hard film. The blade is bent in a direction opposite to a direction of rotation and then fitted in a fitting groove of the tool body. The twist angles on end-surface sides of the blade are positive and negative angles. Therefore, the depth of the blade is circumferentially large enough, and the blade thereby has a higher flexural rigidity than its original flexural rigidity before bending.

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